

Serial No. 10/725,021
Amendment dated April 28, 2006
Reply to Office Action of February 1, 2006

Docket No. DPO-0008

REMARKS

Entry of the amended claims is proper under 37 C.F.R. §1.116 since the amendments: (1) place the application in condition for allowance (for the reasons discussed herein); (2) do not raise any new issues requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution without incorporating additional subject matter); (3) satisfy a requirement of form asserted in the previous Office Action; and/or (4) place the application in better form for appeal (if necessary). Entry is thus requested.

By the present response, Applicants have submitted new claim 32 for consideration by the Examiner and submit that this claim does not contain any prohibited new matter. Moreover, Applicants have canceled claims 13, 15, 18, 30 and 31 without disclaimer. Further, Applicants have amended claims 1, 4, 5, 14 and 25 to further clarify the invention. Claims 1-12, 14, 16, 17, 19-29 and 32 remain pending in the present application. Reconsideration and withdrawal of the outstanding rejections and allowance of the present application are respectfully requested in view of the above amendments and the following remarks.

In the Office Action, claims 1, 2, 3, and 14 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,808,442 (Kaite). Claims 5-8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,387,332 (Oyamada) in view of U.S. Patent No. 6,160,377 (Fujii). Claims 9 and 10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Oyamada in view of Fujii and further in view of U.S. Patent No.

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6,777,913 (You). Claims 11-13 have been rejected under 35 U.S.C. § 103(a) over Oyamada in view of Fujii and further in view of Kaite. Claims 15-24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kaite in view of U.S. Patent No. 5,637,979 (Tamai). Claim 25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the prior art (APA) in view of U.S. Patent No. 5,539,297 (Fiebig). Claims 26, 27, 29 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over APA in view of Fiebig and further in view of Kaite. Claim 28 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over APA in view of Fiebig and further in view of You.

35 U.S.C. § 102 Rejections

Claims 1, 2, 3, and 14 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Kaite et al. Applicants have discussed the deficiencies of this reference in Applicants' previously filed response and reassert all arguments in that response. Applicants respectfully traverse these rejections and provide the following additional remarks.

Regarding claims 1 and 14, Applicants submit that Kaite et al. does not disclose or suggest the limitations in the combination of each of these claims of, *inter alia*, controlling charging each of a plurality of batteries, wherein the each of the plurality of batteries is charged alternatively and wherein the alternative charging is based on satisfying at least one of a charging voltage of each of the plurality of batteries being greater than a reference voltage and a charging current of each of the plurality of batteries being less than a limit current, or resuming charging

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of a first battery until the charging current is less than a limit current indicating a state of full charge, or resuming charging of a second battery until the charging current is less than the limit current indicating a state of full charge, wherein the limit current is a current value at a time of approximately 95% of a full charging voltage, a charging voltage/current characteristic having one of a voltage gradient and a current gradient according to a charging voltage/current of a first battery, or wherein said second charging voltage/current characteristic, the voltage gradient is more than zero and a charging voltage has a reference of approximately 4.2 volts, and wherein a charging current has references of between approximately 100mA and approximately 200mA. These limitations are neither disclosed nor suggested by Kaite et al. The Examiner provides no portions of Kaite et al. that disclose or suggest these limitations in the claims of the present application.

Regarding claims 2, 3 and new claim 32, Applicants submit that these claims are dependent on independent claim 1 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim.

Accordingly, Applicants submit that Kaite et al. does not disclose or suggest the limitations in the combination of each of claims 1, 2, 3, 14 and 32 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

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35 U.S.C. § 103 Rejections

Claims 5-8 have been rejected under 35 U.S.C. § 103(a) over Oyamada et al. in view of Fuji. Applicants have discussed the deficiencies of these references in Applicants' previously filed response and reassert all arguments in that response. Applicants respectfully traverse these rejections and provide the following additional remarks.

Regarding claim 5, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of this claim of, *inter alia*, further resuming charging of the first battery until the charging current of the first battery is less than a limit current indicating a state of full charging, where the limit current is a current value at a time of approximately 95% of a state of a full charging voltage. The Examiner provides no portions of any asserted references that discloses or suggest these limitations in the claims of the present application.

Regarding claims 6-8, Applicants submit that these claims are dependent on independent claim 5 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 5-8 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

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Claims 9 and 10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Oyamada in view of Fuji and further in view of You. Applicants submit that these claims are dependent on independent claim 5 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim.

Claims 11-13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Oyamada in view of Fuji and further in view of Kaite et al. Applicant has canceled claim 13 therefore rendering this rejection moot. Applicant submits that claims 11 and 12 are dependent on independent claim 5 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim. Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 11 and 12 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claims 15-24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kaite et al. in view of Tamai. Applicants submit that these claims are dependent on independent claim 14 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim. Applicants submit that Tamai does not overcome the substantial defects noted previously regarding Kaite et al.

Accordingly, Applicants submit that none of the cited references, taken alone or in any

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proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 15-24 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 25 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over APA in view of Fiebig. Applicants respectfully traverse this rejection.

Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of claim 25 of, *inter alia*, a control circuit to control operations of the first circuit and the second circuit such that the first battery are alternatively charged or stop charging according to charging voltage/current characteristics of the first battery and the second battery. The Examiner provides no portion of any reference that discloses or suggest where the charging is stopped according to charging voltage/current characteristics of the first battery and the second battery.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of claim 25 of the present application. Applicants respectfully request that this rejection be withdrawn and that this claim be allowed.

Claims 26, 27, 29 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over APA in view of Fiebig and further in view of Kaite et al. Applicants respectfully traverse these rejections and submit that these claims are dependent on independent

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claim 25 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 26, 27, 29 and 30 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 28 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over APA in view of Fiebig and You. Applicants respectfully traverse this rejection and submit that claim 28 is dependent on independent claim 25 and, therefore, is patentable at least for the same reasons noted previously regarding this independent claim.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of claim 28 of the present application. Applicants respectfully request that this rejection be withdrawn and that this claim be allowed.

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CONCLUSION

In view of the foregoing Amendments and remarks, Applicants submit that claims 1-12, 14, 16, 17, 19-29 and 32 are now in condition of allowance. Accordingly, early allowance of such claims is respectfully requested. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Frederick D. Bailey, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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